

**Claims**

- 1 A dosing system for applying a viscous fluidic substance comprising a first portion a second portion and a third portion wherein the first portion is a receptacle capable of holding the substance, the second portion comprises a quick disconnect cap assembly capable of substantially preventing leakage of the substance being dispensed, and the third portion is a dose applicator for the substance, wherein the second portion comprises a male connector and a female connector, wherein the male portion removable attaches to the first portion and the female portion sealingly attaches to the third portion, wherein the first or the third portion can be removed from the system without allowing the viscous substance to leave the system.
- 2 The system of Claim 1 wherein the second portion comprises a male connector and a female connector.
- 3 The system of Claim 2 wherein the male portion removable attaches to the first portion.
- 4 The system of Claim 2 wherein the female portion sealingly attaches to the third portion.
- 5 The system of Claim 1 wherein the second portion further comprises a straw, whereby the straw extends into the viscous liquid contained within the receptacle of the first portion when the first portion is removable connected to the second portion.
- 6 The system of Claim 1 wherein the viscous liquid is a medicament.
- 7 The system of Claim 1 wherein the viscous liquid is a progesterone containing medicament.
- 8 The system of Claim 1 wherein the third portion is a spray gun dosing applicator.
- 9 The system of Claim 1 wherein the dosing applicator comprises a dispensing nozzle for dispensing the viscous substance, a dose container for containing a dose of the viscous substance, and a trigger connected between the second portion and the dose container for allowing the viscous substance to flow into the dose container from the receptacle.

- 10 The system of Claim 9 wherein the trigger further comprises a piston.
- 11 The system of Claim 1 further comprising a breather valve on the receptacle whereby a vacuum is prevented from forming within the receptacle.
- 12 The system of Claim 3 wherein the second portion comprises a spring located within the male portion that biases the male portion to a closed position when the second portion is removed from the first portion.
- 13 The system of Claim 1 further comprising a dosing chamber.
- 14 The system of Claim 1 further comprising a spring in the male portion to close the male portion upon disconnection from the female portion.
- 15 The system of Claim 1 further comprising a spring in the female portion to close the female portion upon disconnection from the male portion.
- 16 The system of Claim 1 further comprising a spring in the male portion to close the male portion upon disconnection from the female portion and a spring in the male portion to close the male portion upon disconnection from the female portion, wherein the tension on the spring in the male portion is less than the tension on the spring in the female portion, whereby the viscous fluid is allowed to flow more readily from the female portion through the male portion back to the receptacle.
- 17 A process for dosing the feed of an animal with a medicament comprising the steps of:
  - a. loading a first portion of a system comprising a first portion a second portion and a third portion wherein the first portion is a receptacle capable of holding a viscous substance, the second portion is a quick disconnect cap assembly, and the third portion is a dose applicator for the viscous substance, wherein the second portion is removably attached to the first portion and the second portion

is sealingly attached to the third portion, with a viscous substance comprising a medicament;

- b. withdrawing a dose of the viscous substance from the receptacle; and,
- c. dispensing the viscous substance from the dose applicator into the feed of an animal.

18. The process of Claim 17 further comprising a step of disconnecting the third portion from the first portion, wherein the second portion comprises a male connector and a female connector, wherein the male portion removable attaches to the first portion and the female portion is sealingly attached to the third portion, wherein none of the viscous substance is allowed to leave the system.

19. The process of Claim 17 further comprising the steps of:

- a. dispensing one dose of the viscous substance into the feed of swine until the receptacle is essentially empty of viscous substance;
- b. disconnecting the male portion from the female portion; and,
- c. reconnecting the female portion to a male portion removably attached to a receptacle comprising a viscous substance.

20. The process of Claim 17 wherein the viscous substance is a progesterone containing medicament.

21. A dosing system comprising a receptacle means, a connection means, and a dispensing means,

wherein the first portion is a receptacle means capable of holding the substance, the second portion is a quick disconnect cap means capable of substantially preventing leakage of the substance being dispensed, and the third portion is a

dose applicator means for the substance, wherein the second portion comprises a male connector and a female connector, wherein the male portion removable attaches to the first portion and the female portion sealingly attaches to the third portion, wherein the first or the third portion can be removed from the system without allowing the viscous substance to leave the system.

22. The device of Claim 21 wherein the dosing applicator means comprises a dispensing nozzle means for dispensing the viscous substance, a dose container means for containing a dose of the viscous substance, and a trigger means connected between the second portion and the dose container for allowing the viscous substance to flow into the dose container from the receptacle means.

Express Mail: EV 630723216 US